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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872.084	05/31/2001	Craig S. Cambier	40405.830021.000	3830
7590 03/30/2004			EXAMINER	
Earl C. Hancock HOLLAND & HART LLP P.O. Box 8749 Denver, CO 80201			BRINEY III, WALTER F	
			ART UNIT	PAPER NUMBER
			2644	
			DATE MAILED: 03/30/2004	

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/872,084

Applicant(s)

CAMBIER ET AL.

Examiner

Walter F Briney III

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerszberg (US Patent 6,424,646) in view of Nishikawa (US Patent 4,272,656).

Claim 1 is limited to a **telecommunications system, comprising: a digital subscriber line**; Gerszberg discloses a communication network (i.e. telecommunications system) with a DSL line (figure 5, element SA-DSL). **A plurality of analog telephone terminals**; Gerszberg discloses a plurality of analog telephones (figure 5, elements 15A-n). **At least one digital data terminal**; Gerszberg discloses digital data terminals (figure 5, elements 14A-n). Gerszberg discloses supplying power from the central office during lifeline situations (column 4, lines 56-60). Therefore, Gerszberg discloses all limitations of the claim with the exception of a **power supply having a high voltage alternating current input and a low voltage direct current output**; Nishikawa teaches that modern central offices supply power with AC power (i.e. high power alternating current) that is converted into DC (i.e. low voltage direct current) (Nishikawa, column 1, lines 11-24). It would have been obvious to one of ordinary skill in the art to supply power from the central office using the AC/DC power conversion method as taught by Nishikawa for the purpose of supplying power in case of lifeline

situations. **A telecommunications customer service terminal**; Gerszberg discloses an Intelligent Services Director (ISD) (i.e. customer service terminal) (column 2, line 65-column 3, line 22). **Having a low-voltage signal-input terminal for connection to said digital subscriber line**; Gerszberg discloses connecting the DSL line to the ISD (figure 5, elements SA-DSL and 22 and column 2, line 65-column 3, line 22). **Having a plurality of low-voltage analog telephone output terminals for connection to individual ones of said plurality of analog telephone terminals**; Gerszberg discloses connecting the ISD to a plurality of analog terminals (figure 5, elements 15A-n and column 9, lines 28-57). **Having at least one low-voltage digital data output terminal for connection to said at least one digital data terminal**; Gerszberg discloses connecting the ISD to at least one digital data terminal (figure 5, elements 14A-n and column 9, lines 28-57). **Having a low-voltage direct current power input terminal for connection to said a low voltage direct current output of said power supply**; Gerszberg discloses providing the ISD with power from the central office in case of lifeline situations (column 4, lines 56-60). Gerszberg discloses a modem as part of the ISD (i.e. customer service terminal) that is always on/virtually always on, but it is noted that modems have on/off switches (see Response to Arguments). Therefore, Gerszberg in view of Nishikawa makes obvious all limitations of the claim with the exception wherein **said telecommunications customer service terminal being constructed in the absence of an on/off switch**. Omission of an element and its function is obvious if the function of the element is not desired (In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)). With the removal of the on/off switch of Gerszberg,

the modem constantly transmits in an always on/virtually always on manner **such that said telecommunications customer service terminal remains continuously active only as long as a low voltage direct current is continuously supplied to said low voltage direct current power-input terminal** (column 13, lines 47-55). **A length of telephone wire connecting said signal-input terminal of said telecommunications customer service terminal to said digital subscriber line;** Gerszberg discloses connecting the ISD to the DSL line, which is carried on a twisted pair (i.e. telephone wire) (column 2, line 65-column 3, line 4), so if it is was disconnected there would be no power. **A plurality of lengths of telephone wire connecting individual ones of said analog telephone output terminals of said telecommunications customer service terminal to individual ones of said plurality of analog telephone terminals;**

Gerszberg discloses connecting the ISD to the analog terminals (figure 5, elements 15A-n) with TIP/RING lines (i.e. telephone wire) (column 9, lines 28-57). **At least one length of telephone wire connecting said at least one low-voltage digital data output terminal of said telecommunications customer service terminal to said at least one digital data terminal;** Gerszberg discloses connecting the digital terminals (14A-n) to the ISD with Ethernet lines (i.e. telephone wire) (column 9, lines 28-57). **A length of telephone wire connecting said low voltage direct current power terminal of said telecommunications customer service terminal to said low voltage direct current output of said power supply;** Gerszberg discloses connecting the ISD to the central office that is supplying power with a twisted pair in case of lifeline

situations (i.e. telephone wire) (column 4, lines 56-60). Therefore, Gerszberg in view of Nishikawa discloses all limitations of the claim.

Claim 4 is essentially the same as claim 1 and is rejected for the same reasons.

Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Gerszberg in view of Nishikawa as applied to claim 1 above, and further in view of Suntop (US Patent 3,932,712).

Claim 2 is essentially the same as claim 1 and is rejected for the same reasons. Therefore, Gerszberg in view of Nishikawa discloses all limitations of the claim with the exception of **a length of AWG telephone wire connecting said low voltage direct current input terminal of said telecommunications customer service terminal to said low voltage direct current output of said power supply**; Suntop teaches to use AWG telephone wire of a suitable grade between the central office and the ISD to provide power for the purpose of meeting the distance needs between the central office and customer's premises (column 3, lines 4-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to use suitable AWG telephone wire for the purpose of providing the correct wire gauge for the distance between the central office and the customer's premises.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerszberg in view of Nishikawa and in further view of Suntop as applied to claims 2 and 4 respectively above, and further in view of Williams et al. (US Patent 5,216,704).

Claim 3 is limited to **the telecommunications system of claim 2**, as covered by Gerszberg in view of Nishikawa and in further view of Suntop, with the further limitation

**wherein said power supply includes: a manually-removable battery pack that is operable to supply a low voltage direct current to said low voltage direct current input terminal of said telecommunications customer service terminal upon failure of said high voltage alternating current input to said power supply;** Nishikawa teaches backing up the AC power of the central office with batteries (i.e. supplying direct current upon failure of alternating current) (Nishikawa, column 1, lines 11-24). Therefore, Gerszberg in view of Nishikawa and further in view of Suntop makes obvious all limitations of the claim with exception **wherein said battery pack being replaceable with a different battery pack when said battery pack becomes discharged or relatively discharged in the presence of a failure of said high voltage alternating current input to said power supply;** Williams teaches that batteries used in a power backup system under a power failure need to be replaced because they have a finite life (column 5, lines 3-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the battery pack used in a power backup system under power failure with a different battery pack for the purpose of compensating for the finite life of a battery.

Claim 5 is essentially the same as claim 3 and is rejected for the same reasons.

### ***Response to Arguments***

Applicant's arguments filed on 20 January 2004 with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

The applicant alleges that Gerszberg **does not teach supplying operating power to Gerszberg's customer premise's equipment in the event of a power failure at the CPE**; the examiner respectfully disagrees. Gerszberg discloses providing lifeline service in the event of a power failure to the CPE (column 4, lines 56-57). Lifeline service comprises continuous telephone service. Telephone service provides DC power on the line, analog telephones then use the DC for amplification and signaling; therefore, lifeline service is a means to provide DC power to the conventional analog telephones of Gerszberg. As an example of how the DC power provided during basic telephone service is used to power circuits see Understanding Telephone Electronics (chapter 3).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **that the modem of Gerszberg is not a customer services terminal as is defined in detail in applicants' claims**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant alleges that **the always on and/or virtually always on functionality of Gerszberg's modem does not relate to energization of the modem**; the examiner respectfully disagrees. Gerszberg discloses a modem that has the ability to decrease its power output by decreasing the number of tone banks used in a DMT transmission process (column 13, lines 45-50). When no transmission is being

performed, only a very low bandwidth channel is required (column 13, lines 51-52). Therefore, Gerszberg discloses varying the power output of the modem while never turning the modem off.

The applicant alleges that Gerszberg in view of Nishikawa **would be provided only for the energization of Gerszberg's telephone lines**; the examiner respectfully disagrees. For the same reasons as given with respect to providing lifeline support and basic telephone service, the analog telephones of Gerszberg would be supplied with the DC power generated by the central office of Gerszberg using the AC/DC converter of Nishikawa.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **benefit that telephone wire is readily available to installation-personnel because quantities of telephone wire are stored in the personnel's telephone installation truck**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant alleges that Gerszberg **does not teach connecting low voltage equipment to a customer service terminal with a plurality of telephone wire**; the examiner respectfully disagrees. Gerszberg discloses low voltage devices (figure 5, elements 14A-B, 15A-n, 18a-n) that are each connected by wires that carry telephone signals (i.e. telephone wire).

The applicant alleges **that Gerszberg is silent as to the presence of an on/off switch and that the prior art does not disclose the arrangement wherein a customer service terminal is turned-on merely by connecting the low voltage DC output of a high-voltage-AC-to-low-voltage-DC power supply to the low voltage DC power input of the customer service terminal and that modems do in fact include on/off switches**; the examiner respectfully disagrees. It is true that Gerszberg is silent to the presence of an on/off switch. However, Gerszberg teaches a modem that is always-on, so that at least one DMT tone bank is operating, thus providing communications with little delay. If an on/off switch was present, the modem could not be always-on.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

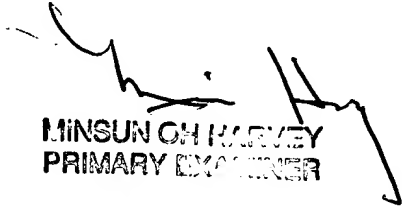
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F Briney III whose telephone number is 703-305-0347. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WFB  
3/19/04



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PRIMARY EXAMINER